

We Claim:

1. A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured current consumption, said control device controlling said clock supply circuit to filter out individual clock pulses of said clock signal and reduce a clock frequency at said output of said clock supply circuit when the current consumption of the circuit configuration increases.

2. The frequency regulating circuit according to claim 1, further comprising means for comparing the current measured by the current measuring device with a definable threshold value.

3. The frequency regulating circuit according to claim 1, further comprising a comparator comparing the current measured by the current measuring device with a definable threshold value.

4. A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured

current consumption, said control device programmed to control said clock supply circuit by filtering out individual clock pulses of said clock signal to reduce a clock frequency at said output of said clock supply circuit when the current consumption of the circuit configuration increases.

5. The frequency regulating circuit according to claim 4, further comprising means for comparing the current measured by the current measuring device with a definable threshold value.

6. The frequency regulating circuit according to claim 4, further comprising a comparator comparing the current measured by the current measuring device with a definable threshold value.

7. A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured current consumption, said control device programmed to filter out individual clock pulses of said clock signal for reducing a clock frequency at said output of said clock supply circuit during an increase in the current consumption of the circuit configuration.

8. The frequency regulating circuit according to claim 7, further comprising means for comparing the current measured by the current measuring device with a definable threshold value.

9. The frequency regulating circuit according to claim 7, further comprising a comparator comparing the current measured by the current measuring device with a definable threshold value.